

WHAT IS CLAIMED IS:

1. An insert molding technique for shaping an insert-mold product covered with resinous material on the outer circumference of an insert component, comprising  
5 an arrangement step for locating the insert component within the interior space of the resinous material through an opening formed at at least one end thereof, and

10 a shaping step for covering the insert component with the resinous material to shape the latter in conformity with the contour of the former by at least one of heating, air suction and pressure due to clamping.

2. An insert molding technique as defined by claim 1, wherein the resinous material and the insert component  
15 are partially welded to each other by welding means simultaneously during or after the shaping step.

3. An insert molding technique as defined by claim 2, wherein the welding means generates either one of heat, a laser beam and ultrasound.

20 4. An insert molding technique as defined by claim 1, further comprising a locating step for locating the insert component at a predetermined position between a pair of halves of a mold in an open state by a support for holding the insert component outside of the mold,  
25 wherein

in the arrangement step, the resinous material is extruded in a molten state as a tube through a die between the pair of halves of the mold, and the insert component is located in the interior space of the  
30 tube, and

in the shaping step, the mold is clamped to cover the insert component with the tubular resinous material in conformity with the contour of the insert component.

35 5. An insert molding technique as defined by claim 4, wherein after the arrangement step, the shaping step follows, in which an extrusion-side opening of the

tubular resinous material is brought into contact with part of the insert component or the support and closed, and by sucking air in the interior space of the resinous material, the insert component is covered with the tubular resinous material and shaped in conformity with the contour of the former.

6. An insert molding technique as defined by claim 4, wherein the shaping step by the air suction is carried out prior to or simultaneously with the clamping.

7. An insert molding technique as defined by claim 4, wherein the shaping step follows to the arrangement step, wherein the tubular resinous material is heated to cover the insert component in conformity with the contour of the latter prior to or simultaneously with the clamping.

8. An insert molding technique as defined by claim 4, wherein the welding means is provided at a predetermined position of the mold.

9. An insert molding technique as defined by claim 1, further comprising a extrusion step for extruding a parison, which is a molten resinous material, between a pair of halves of a mold through a die, and

a primary molding step for forming the resinous material having the interior space with one opening at one end thereof by clamping the mold to bring the parison into contact with a forming surface of the die while blowing air into the parison, wherein

in the arrangement step, the resinous material produced through the primary molding step is removed from the mold and the insert component is inserted into the interior space from the opening while being fastened to a fastening section, and

in the shaping step, the resinous material is heated and shrunk after the arrangement step to cover the insert component in conformity with the contour thereof.

10. An insert molding technique as defined by claim

9, wherein the resinous material obtained by the primary molding step is disposed in a second mold separate from the former mold, and is clamped by the second mold while being heated and partially fixed with a fastening section of the second mold to cover the insert component in conformity with the contour thereof.

11. An insert molding technique as defined by claim 9, wherein the resinous material covers the insert component in conformity with the contour thereof by the heating while sucking air from the opening of the resinous material obtained by the primary molding.

12. An insert molding technique as defined by claim 9, wherein the welding means is provided in the fastening section.

13. An insert molding technique as defined by claim 9, wherein a preliminarily prepared heat-shrinkable tube is used in place of the resinous material obtained by the primary molding.